

MICROGRAVITY ACCELEROMETER TEST FACILITY

Purpose:

To provide the capability to test various types of accelerometers used for inertial navigation or low-gravity experiments.

A granite surface plate mounted on an air-isolated table attenuates vibrations from the ground or the building. This table is mounted on a very thick Presently, the facility is being used to calibrate the accelerometers for the g-LIMIT Program. The facility is located in Building 4487.

concrete seismic pad for further isolation. precision, motorized dividing head and laser interferometer are used to position accelerometers in the local gravity field to obtain scale factor and bias calibration An values. optional tiltmeter may be mounted on the table to obtain sub-arc second accuracies. A computer



compiles the calibration data and can display the results in graphic and tabular form. Other pieces of equipment are available to measure other aspects of accelerometer performance, such as power spectral density and random drift.

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